Indicator 6.41:

U.S. Forest Sustainability Indicators https://www.fs.fed.us/research/sustain/

Area and percent of forests available and managed for public recreation and tourism

Eric M. White June 1, 2021

What is the indicator and why is it important?

Forest-based recreation and tourism is a significant benefit that forests provide to people. This indicator measures the extent to which forests serve and are managed as potential recreation and tourism places. This is important because those engaging in recreation and tourism are often doing so on lands owned by Federal, State, or local governments or on private lands owned by someone else. Further, the availability of places to engage in forest-based outdoor recreation and tourism is a key factor in whether people choose to participate in forest-based outdoor recreation. Finally, outdoor recreation is an economic driver in the United States, accounting for 2.2 percent of the U.S. gross domestic product and supporting 5 million jobs (Bureau of Economic Analysis 2019).

What does the indicator show?

Publicly owned lands—

There are 765.5 million acres of forestland in the United States and an additional 57.0 million acres of woodland (Oswalt et al. 2019). About 38 percent of the forestland in the United States is owned by Federal, State, or local governments (Butler et al. 2020) (fig. 41-1). Excluding the several million acres of forests managed by the U.S. Departments of Defense and Energy, the remaining Federal forestland (235 million acres) is generally available for recreation. Providing for and managing recreation opportunities are primary components of the missions of each Federal natural resource agency—notably the U.S. Department of Agriculture, Forest Service and Bureau of Land Management—managing Federal forests. The majority of federally owned forestland available for recreation is part of the National Forest System of the

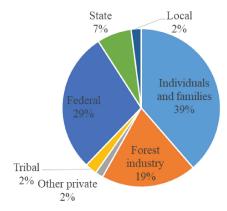


Figure 41-1—U.S. forest ownership. (Source: Butler et al. 2020)

Forest Service. The National Forest System includes about 145 million acres, or 19 percent, of U.S. forestland (Oswalt et al. 2019).

Forests owned by State governments (18 percent of all public U.S. forestland) are managed by a variety of State agencies, including State park and State forest systems. Recreation is a central focus of State park agencies, and forested landscapes within those systems are available and managed for recreation. Although some States do invest heavily in providing recreation opportunities on State-owned forests located outside of State parks, those lands may not always be open to recreation use. Further, in general, State forest agency investment in recreation opportunities is limited. In 2018, State forestry agencies across the United States spent about \$43 million on their recreation programs (National Association of State Foresters 2019).

Privately owned lands—

Privately owned lands account for 60 percent of U.S. forests. Among private owners, individuals and families own more forested acres—272 million—than any other ownership group (Butler et al. 2020). Recreation opportunities on forests owned by individuals and families

is almost exclusively available only to the owners' families and friends rather than the general public (Butler et al. 2020). Approximately 56 percent of the land owned by these individuals has been used for recreation by the owners; 46 percent has been used by the owners' children, and 41 percent has been used by owners' friends in recent years (Butler et al. 2020) (table 41-1). The most common recreational use of these lands is hunting, followed by fishing, hiking/walking, and off-highway vehicle recreation. About 5 percent of the forestland area owned by individuals and families is available for public recreation (Butler et al. 2020). Recreation is more common on individual and family forest parcels that are greater than 10 acres in size (Butler et al. 2016, Butler and Snyder 2017). Recreation was identified as a "very important" or "important" reason for owning about half of the forestland acres owned by individuals and families. Although recreation was generally viewed as important, only a small share of this forestland is managed to improve recreation opportunity. Approximately one-quarter of individual and family forestland acres (and 14 percent of ownerships) are part of holdings that have had trail improvements, and about 35 percent of acres (13 percent of ownerships) are part of holdings that have undergone management to improve wildlife habitat in the last 5 years (Butler et al. 2020).

Many forest industry corporations make their lands available for public recreation for at least a portion of the year. In a survey of large corporate forestland owners (those owning more than 45,000 acres), 74 percent reported allowing public recreation access for free and 85 percent allowed access for a fee—many large corporate forestland owners provide a mix of both free and fee opportunities (Sass, personal communication). In general, recreation is a lower-priority management objective of

corporate landowners. About one-third of large corporate forestland owners identified hunting as an ownership objective while 20 percent identified recreation in general as an ownership objective (not mutually exclusive categories) (Sass et al. in press).

What has changed since 2010?

Forestland area in the United States had been increasing from the late 1990s to 2012. Beginning in 2012, that trend changed and U.S. forestland area has been stable to slightly declining (Oswalt et al. 2019). Federal land area (and Federal forest area) has been stable over the decade. This continues a long-term trend of fairly constant size of Federal forest holdings, despite renewed calls by some policymakers in the latter half of the 2010s to transfer lands out of Federal ownership. Although Federal forestland area has remained mostly stable since 2012, the U.S. population continued to increase during the period. As such, per capita Federal forest area declined from 2.44 acres in 2012 to 2.16 acres in 2017.

Although Federal ownership has been mostly unchanged, there have been significant changes in private forestland ownership in the last 10 to 15 years. Among forest industry owners, there has been extensive conversion of forest holdings into timberland investment entities. Within the individual and family ownership group, as owners continue to age, there is a continuing trend of ownership being converted to small corporations (among family members) or sold to other individuals (Oswalt et al. 2019, Sass et al. in press). These changes in ownership have the potential to change the accessibility of private forests for public recreation as new owners make new decisions about

Table 41-1—Share of individual and family owned forestland area used for recreation

Who recreates?		What do they do?	
Owner(s)	67%	Hunting	80%
Friends	61%	Hiking/walking	57%
Children	60%	Off-road vehicles	36%
Other family	56%	Fishing	31%
Neighbors	30%	Camping	19%
Nobody	8%	Horseback riding	14%
Other	7%	Biking	7%
Public (for free)	5%	Skiing/snowshoeing	7%
Public (for fee)	5%	Other	2%

Source: Butler et al. 2020. Respondents can select multiple items so rows do not sum to 100.

allowing recreation access. Despite that potential, for individuals and family forest landowners, the share of land area used for recreation by owners, family/friends, and the general public has been generally stable through the 2010s (Butler et al. 2020, Butler et al. 2016, Butler and Snyder 2017). Similar comparisons are not available for large forest corporation land holdings. There is some evidence that changes in ownership of private lands (forested or otherwise) on the peripheries of Federal forestlands can reduce access to Federal forests for recreation (White et al. in press, Peterson et al. 2007, Stein et al. 2007).

Natural disturbances, such as wildfires, floods, and wind events, are ecological processes that have shaped the forest resources we see today. In the 2010s, the severity and magnitude of some of these disturbances were greater than that seen in seen in prior decades. In some cases, these disturbances covered very large landscapes or drastically altered forest and natural resource conditions over short periods of time. Over the last decade, public and private landowners have enacted temporary closures of their lands to recreation use in response to active wildfire, weather, and forest conditions that yield a high risk of wildfire, and post-disturbance conditions (e.g., unstable slopes or dead trees) that may threaten visitor safety. In addition, there is now preliminary evidence that existing or potential smoke from wildfire is beginning to influence where and when visitors take outdoor recreation trips (White et al. 2020). Continued forest disturbance may lead to more periods when forest resources are unavailable for recreation use in the coming decade. This has the potential to compress outdoor recreation on forestlands to shorter periods during the year, to change the forestland locations where people recreate, and to reduce the number of people engaging in outdoor recreation.

Are there important regional differences?

Forestlands are a prerequisite for forest-based recreation opportunities, and they are most common in the Southern, Northern, and Pacific Coast Regions, where forests account for between about 38 to 48 percent of the land area (Oswalt et al. 2019). The Rocky Mountain Region is the least forested region with slightly more than 20 percent of land area in forest. In the Rocky Mountain Region (which includes the Great Plains States), rangelands and croplands are the most common land uses. Although forestland area has been generally stable since 2010, small increases were found in all regions except the Pacific Coast Region, where forestland area declined slightly (partly owing to changes in how forestlands were defined in that region). Publicly

owned forests (especially federally owned forests) are most common in the Western United States while privately owned forests are more common in the Eastern United States and especially the South. In general, those living in the West have much greater access to Federal forests than those living in other U.S. regions.

Although some private landowners in all U.S. regions charge fees to access their lands for recreation, that practice is especially common in the South. In particular, hunting leases and clubs (where those who pay annual fees have right of hunting access) are common on southern privately owned forests (e.g., Mingie et al. 2017). The regional popularity of hunting leases in the South is a reflection of the limited supply of public lands, tradition, and private landowners who are interested in diversified revenue streams from their forestlands.

Why can't the indicator be fully reported at this time?

Comprehensive data on the availability and management of U.S. forestlands for recreation does not exist. In this indicator we assume that publicly owned lands are generally available for recreation. Although this is typically true, some forested areas on Federal natural resource agency lands, such as municipal watersheds, are not open to recreation. Likewise, some State and local forests may be closed to recreation entirely or for portions of the year, such as during wildfire season or periods of forestry operations. For privately owned land, we rely on data collected from a sample of landowners to estimate the share of land available and managed for recreation. Although these samples are statistically rigorous, we must still make inferences about behavior across all private forest landowners. Lack of comprehensive data on forestland availability for recreation also makes it difficult to assess spatial patterns beyond general regional variation.

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